

Before The  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

In the Matter of:	)	
	)	
New Part 4 of the Commission's Rules	)	ET Docket No. 04-35
Concerning Disruptions to Communications	)	

**COMMENTS OF GLOBALSTAR LLC**

Pursuant to Section 1.415 of the Commission's Rules (47 C.F.R. § 1.415), Globalstar LLC ("Globalstar") submits the following comments on the Commission's proposed new Part 4 concerning service disruptions to communications generally and to satellite-based communications specifically.<sup>1</sup>

Globalstar is the parent of companies that hold authorizations for a "Big LEO" Mobile-Satellite Service ("MSS") space station constellation operating in the 1.6/2.4 GHz bands and associated earth stations, both fixed gateway stations and mobile earth terminals ("METs").<sup>2</sup> Globalstar's subsidiary, Globalstar USA LLC, is the service provider for Globalstar MSS in the United States and Caribbean regions. Pursuant to the Commission's proposed rules, the Globalstar licensee

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<sup>1</sup> Notice of Proposed Rulemaking, FCC 04-30 (released Feb. 23, 2004) ("NPRM").

<sup>2</sup> New Operating Globalstar LLC, the successor to Globalstar, L.P. and L/Q Licensee, Inc., has changed its name to "Globalstar LLC." See Public Notice, DA 04-628 (released March 8, 2004).

companies would be subject to the service disruption reporting requirements for “satellite communications providers.”

The Commission grounds its proposed Part 4 on the need to obtain rapid reports of service communications outages and their resolutions to promote the development of “best practice” guidelines for the avoidance of future service disruptions. Yet, for satellite providers, certain of the new Part 4 requirements are based on hardware outages rather than service outages, and the Commission has previously rejected reporting of such equipment failures for wireline carriers.

Also, the Commission believes that the new outage reporting requirements are justified by the need to protect the security of U.S. telecommunications networks. Yet, the Commission proposes that reports will be available to the public. It is not at all clear how public reporting of the details of service outages promotes the security of telecommunications networks at this time.

Globalstar explains below why the Commission should modify the reporting requirements for satellite communications providers and why a confidential method for reporting should be used in the future. Finally, Globalstar requests clarification of the entities that must report as “satellite communications providers.”

**I. THE COMMISSION SHOULD REQUIRE REPORTS ONLY OF OUTAGES AFFECTING SERVICE TO USERS.**

The Commission proposes to extend its outage reporting requirements to wireless communications providers, including satellite communications providers. According to the Commission, reportable outages include a communications disruption that constitutes an inability to access a network, or, once a network has

been successfully accessed, an inability to complete the communication effectively. (NPRM, ¶ 19.) The Commission proposes generally to require reporting for communications disruptions that have a duration of at least 30 minutes and affect 900,000 or more “user minutes.” (NPRM, ¶ 22.)

The Commission proposes to require satellite communications providers to report outages meeting the duration and user impact metrics. However, the Commission also proposes to require satellite communications providers to report the “loss of complete accessibility to at least one satellite or transponder” that lasts for at least 30 minutes. *Proposed § 4.9(d)*. For the Globalstar non-geostationary (“NGSO”) satellite system, loss of access to a single satellite would not necessarily result in communications disruption or service outages.

The Globalstar MSS system consists of a non-geostationary satellite constellation and an associated ground network. Currently, there are two North American gateways in Canada, one in Texas and one in Puerto Rico. The Globalstar constellation of NGSO satellites is designed to provide substantial redundancy to users by having multiple satellites in view at most places on the earth at any given time. Also, there are in-orbit spares that can be used to fill gaps in coverage. Therefore, the loss of access to one satellite may at times lower the quality of service available to users, but it would not cause a service outage. Similarly, the loss of a gateway antenna subsystem would still allow the gateway station to operate, albeit on one less satellite simultaneously, but it would not create a service outage. If a single gateway station serving the United States were

completely incapacitated, overlapping coverage from other gateway stations could be activated, minimizing or eliminating a service outage.

The Commission has clearly articulated the goal for reporting service *outages*. But, it has not articulated a reason for tracking mere equipment failures that do not result in communications service outages.

Indeed, when the Commission adopted the reporting requirements for wireline carriers in 1992, it acknowledged that “[o]ur concern . . . focuses on loss of service to the public.”<sup>3</sup> And, in response to an objection to reporting mere equipment failures, the Commission agreed that a loss affecting network equipment that “does not, through the use of redundant facilities and rerouting capabilities, for example, result in a service outage,” would not rise to the level of significance that requires reporting.<sup>4</sup>

The same principle should be applied to the proposed reporting requirements for satellite communications providers. The Commission has explained that the reports are to be used to develop industry best practices that can be used to prevent service outages. (NPRM, ¶ 4.) The Globalstar satellite system was designed to incorporate redundancy because it is virtually impossible to make improvements to the space station in orbit. Therefore, reporting the failure of a single satellite is not

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<sup>3</sup> Amendment of Part 63 of the Commission’s Rules to Provide for Notification by Common Carriers of Service Disruptions, 7 FCC Rcd 2010, 2012 (1992).

<sup>4</sup> Id.

going to point to improvements to prevent *service* outages that can be made in the system or other in-orbit NGSO satellite systems.

As the Commission recognizes in the NPRM (note 91), satellite licensees are already subject to annual reporting requirements that include reports of information proposed to be captured by new Part 4, primarily, the operational status of the space stations in the constellation. These annual reports appear to be sufficient to capture the information regarding satellite failures that do not result in service disruptions.

Reporting satellite service outages that reach the “common metric” should capture the information that the Commission deems necessary for the goals of this rulemaking.<sup>5</sup> The Commission should not single out satellite service providers for equipment reporting requirements when it has already decided that equipment failures without loss of service are not reportable events for wireline carriers.

## **II. THE COMMISSION HAS FAILED TO JUSTIFY PUBLIC REPORTING OF COMMUNICATIONS DISRUPTIONS.**

There is an inherent conflict in the Commission’s rationale for requiring outage reports and its method for collecting that information. The Commission desires to collect information on service outages to promote the reliability of telecommunications systems (NPRM, ¶ 3), yet it also wants to use these reports to

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<sup>5</sup> Even if the Commission retains the outage reports for single satellite inaccessibility, it should acknowledge that the same 120 minute reporting requirement is not relevant because there is no service outage that would be noticeable to users requiring rapid reporting.

expose “vulnerabilities” in these systems (NPRM, ¶ 4).<sup>6</sup> In addition, the Commission plans to make these reports available to the public. (NPRM, ¶ 50.)

As the Commission recognizes in the NPRM, the United States “has become totally dependent on communications services that are now essential to the operation of virtually all government, business, and critical infrastructures throughout the United States as well as to our Nation’s economy.” (NPRM, ¶ 3.) Given that a terrorist attack can cripple these telecommunications services, it is not at all clear why the Commission would even consider exposing any vulnerabilities in the networks to the public.

Twelve years ago, the Commission rejected calls for greater confidentiality in outage reports claiming that “[c]oncerns of . . . aiding saboteurs resulting from disclosure are not supported.”<sup>7</sup> In the NPRM, the Commission prominently acknowledges the terrorist attacks of September 11, 2001 and the need to bolster homeland security (NPRM, ¶ 2), but it ignores the current dangers of overexposing information regarding critical infrastructures. Nevertheless, Chairman Powell

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<sup>6</sup> The Commission claims that public reporting has allowed operators to learn from the mistakes of others. (NPRM, ¶¶ 8-10.) But, reporting “lessons learned” does not require public reporting all the technical details of an outage incident. And the fear of neither disclosure of competitively sensitive information nor public embarrassment is a strong enough incentive to do the impossible—design a communications network that will never fail.

<sup>7</sup> Amendment of Part 63, 7 FCC Rcd at 2016.

recently stated that “[i]n the post 9/11 world, security is our greatest challenge and must be our highest priority.”<sup>8</sup>

Moreover, as the Commission is well aware, information on network failures is likely to include commercially sensitive and propriety network information of the type that is not usually made available to the public or competitors.<sup>9</sup>

When there is a telecommunications outage, the affected company is probably in the best position to determine how much information regarding that outage should be released to the public. If the Commission desires to obtain detailed information on such outages, it should ensure that the outage reports are delivered to the Commission in a secure and confidential fashion, that the data on the outages are maintained in storage in a secure format and location, and that any additional release of information is provided in a configuration that does not compromise the security and reliability of the affected network and potentially affected networks.

Outage reports can be filed with a request for confidentiality. However, such requests can be challenged, and the Commission could be faced with deciding multiple challenges annually on an individual basis. Nor should the Commission only provide security for outage reports during periods of elevated alerts from the Department of Homeland Security. That would be too late. The Commission should decide *now* that information on outages can be filed confidentially.

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<sup>8</sup> Remarks of Chairman Michael K. Powell at the NSTAC XXVII Executive Session Luncheon (May 19, 2004).

<sup>9</sup> See 47 C.F.R. § 0.457(d).

For example, the required format for outage reports could be designed to allow filing of “public” and “confidential” information, which can be severed if need be for public reports. And, the confidentiality of the information should be maintained by not revealing the individual report and, e.g., not revealing the source in compilations of outage records.

The environment in which these reports are being collected has changed since 1992. The Commission must acknowledge that change and provide for additional security for outage reports.

### **III. THE COMMISSION MUST CLARIFY THE REPORTING REQUIREMENTS FOR SATELLITE PROVIDERS.**

As the Commission recognizes in the NPRM (§ 43), a satellite system consists of several components: space stations, gateway earth stations, and METs. Globalstar calls use the gateway and satellite stations to connect calls to Globalstar terminals, but the calls also use the Public Switched Telephone Network (“PSTN”) for transmission from gateway to gateway or from gateway to landline or cellular phones. An equipment failure can occur in any one or combination of these components resulting in what could be a reportable outage under the common metric.

The Commission’s definition of “satellite communications provider” points to the satellite operator as well as “affiliated and non-affiliated entities that maintain or provide communications systems or services used by the provider in offering such communications.” *Proposed § 4.3(d)*.

The reporting requirement would apply to “all satellite communications providers,” which, as the definition is written, could cover many different entities for the same satellite network. But, for one satellite link disruption, the Commission only needs one report. Accordingly, the Commission should clarify that the entity in control of the source of the disruption is the entity that is required to file any disruption report.

Such a clarification would be consistent with the reporting requirements for wireline carriers. The Commission acknowledged in 1992 that, when an outage affects service on more than one carrier, “the carrier which owns or operates the affected facilities must report the outage.”<sup>10</sup> The Commission should, therefore, clarify in the new rules that the owner or operator of the affected facility is the only entity required to file an outage report, although other affected carriers may do so voluntarily.

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<sup>10</sup> Amendment of Part 63, 7 FCC Rcd at 2015.

#### IV. CONCLUSION


For the reasons set forth above, Globalstar urges the Commission to (a) eliminate the reporting requirement for loss of service for any one satellite which does not result in service disruption, (b) adopt more stringent security measures for outage reports, and (c) clarify that the owner or operator of affected facilities is the only "satellite communications provider" required to file an outage report.

Respectfully submitted,

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